

\*Salary to be used for additional help and not for the investigator. Date: January 11, 1955

7. Anticipated Duration of Work: **Two weeks**

1. Name of Investigator: **Dr. J. Manly Stallworth, M.D.**

8. Facilities and Staff Available: **Direct writer plethysmograph machine, thermocouple and**

2. Title: **The Effects of Cigarette Smoke on the Peripheral Vascular System, funds.**

**Two medical fellows in Cardiology - one full time, one part time -**

**available to run the cooperative studies.**

3. Institution: **Cardiovascular Dept., Medical College of South Carolina**

& Address: **16 Lucas Street, Charleston, South Carolina**

4. Project or Subject: **A comparison of the effects of smoking cigarettes with those of**

**subcutaneous injections of adrenalin chloride on the peripheral vascular**

**system of normal males in an effort to determine what the effects of smoking**

**a cigarette is equivalent to in terms of a known vasoconstricting agent.**

10. Additional Information (including relation of work to other projects and other matters of record):

5. Detailed Plan of Procedure (Use reverse side if additional space is needed): **Comparison is to be made of the**

**effects of smoking two standard, popular brand, non-filtered, cigarettes at**

**a natural rate, and a standard dose (amount to be determined) of sub-cutaneous**

**adrenalin chloride on the peripheral vascular system of human**

**subjects. Subjects will be normal male medical students or members of,**

**our hospital house staff, the majority of whom will be habitual smokers**

**but will include non-smokers for comparison. Utilized for this compari-**

**son will be pulse rate, blood pressure, skin temperature, and plethysmo-**

**graphic determination of pulse volume. The skin temperature and the**

**pulse volume are to be obtained from the digits of both the upper and**

**lower extremities. Serial determinations are to be made on cigarette**

**fasting subjects before, during and after both the smoking and adrenalin**

**administration, with a minimum of twenty-four hours separating the two.**

signature

Director of Finance

J. Marly Stallworth, H.D.

**Business Officer of the**

H. M. Pirloy

1003541245

## 6. Budget Plan:

Salaries

\$3,600.00\*

Expendable Supplies

200.00

Permanent Equipment

0.00

Overhead

304.00

Other

0.00

Total

\$4,104.00

\*Salary to be used for additional help and not for the investigator.

## 7. Anticipated Duration of Work:

Name of **Twelve Months.** **Manly Stallworth, M.D.**

## 8. Facilities and Staff Available:

7. Title: **Direct writer plethysmograph machine, thermocouple and other permanent equipment are on hand or on order from other grant funds. Two medical fellows in Cardiology - one full time, one part time - available to run the comparative studies.**

## 3. Institution

&amp; Address

## 4. Project or Subject

## 9. Additional Requirements:

muscle activity. **None.**

## 10. Additional Information (Including relation of work to other projects and other sources of supply):

5. Detailed **Current investigation by colleagues under another grant is under way in an effort to establish a method of measuring vessel constriction utilizing microphotography of conjunctival vessels. When this is proven and available further opportunity will be afforded to study the effect of smoking on peripheral vessels and comparison of smoking and vasoconstrictor drugs.**

Signature /s/ J. Manly Stallworth  
Director of Project

**J. Manly Stallworth, M.D.**

Business Officer of the Institution

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